# NATURAL HISTORY

## VOLUME LXXXIV

## 1975

*Published by*
THE AMERICAN MUSEUM OF NATURAL HISTORY
NEW YORK, N.Y.

---

JANUARY No. 1

AUTHORS ..... 2
IN PRAISE OF ROBOTS ..... Carl Sagan 8
THIS VIEW OF LIFE: EVOLUTION AND THE BRAIN
Stephen Jay Gould 24
BIOS: ROTTEN APPLES AND RIPE BANANAS
Arthur W. Galston 30
SECRETS OF PERU'S ANCIENT WALLS
Michael E. Moseley 34
THE VICTORIOUS COYOTE ..... Pamela McMahan 42
DESIGNING WOMEN OF WEST AFRICA ..... Lisa Aronson 52
TAHOE'S TROUBLED WATERS
The Tahoe Research Group 60
MONKEY ON A RIVERBANK .... Katherine M. Homewood 68
THE HAZARDS OF PLUTONIUM ..... J. Gustave Speth 74
CELESTIAL EVENTS ..... Thomas D. Nicholson 86
LETTERS ..... 88
ADDITIONAL READING ..... 91
NATURAL ENEMIES IN PLACE OF POISONS
Review by Richard D. Alexander 92
A MATTER OF TASTE: THE MELTING POT
Raymond Sokolov 98
ANNOUNCEMENTS ..... 102

FEBRUARY No. 2

AUTHORS ..... 2
LETTERS ..... 8
SKY REPORTER: THE WORLD'S BIGGEST MEMBRANE
Lewis Thomas 12
THIS VIEW OF LIFE: CATASTROPHES AND STEADY STATE EARTH ..... Stephen Jay Gould 14
THE GEOLOGIST AS PRIVATE EYE
Raymond C. Murray 22
A TALE OF TWO BUTTERFLIES ..... John R. G. Turner 28
TO THE SINGING, TO THE DRUMS ... N. Scott Momaday 38
CHINESE SHADOW THEATER ..... Bettie Erda 46
THE CHAOS BOX ..... 47
RETURN OF THE OSPREY ..... Dennis Puleston 52
SURVIVORS FROM THE GOOD OLD, OLD, OLD DAYS ..... Niles Eldredge 60
A MATTER OF TASTE: A PLANT OF ILL REPUTE
Raymond Sokolov 70
BIOS: HERE COME THE CLONES ..... Arthur W. Galston 72
CELESTIAL EVENTS ..... Thomas D. Nicholson 76
THE MYTH OF MALE SUPREMACY
Review by Judith Shapiro 78
ADDITIONAL READING ..... 83
ANNOUNCEMENTS ..... 84

MARCH No. 3

AUTHORS ..... 2
LETTERS ..... 4
SKY REPORTER: KALLIOPE AND THE KAA'BA
Carl Sagan 8
BIOS: IN SEARCH OF THE ANTIAGING COCKTAIL
Arthur W. Galston 14
THIS VIEW OF LIFE: VELIKOVSKY IN COLLISION
Stephen Jay Gould 20
THE PERSISTENT GUAJIRO ..... Homer Aschmann
Photographs by Victor Englebert 28
LIVING LINKS WITH THE PAST
Rudolf and Marvin J. Schmid
Photographs by David Muench 38
RAPID RIVERS OF AIR ..... Elmar R. Reiter 46
ASCENT OF THE PRIMATES ..... R. D. Martin 52
KITE CRAZY ..... Review by Donald Richie 62
THE PREVALENCE OF FIVES ..... Gerald Oster 76
A MATTER OF TASTE: POTATOES ARE CHEAPER
Raymond Sokolov 78
CELESTIAL EVENTS ..... Thomas D. Nicholson 82
ADDITIONAL READING ..... 84
ANNOUNCEMENTS ..... 86

APRIL No. 4

AUTHORS ..... 5
ANNOUNCEMENTS ..... 8
THE MYTH OF TRIBE ..... Morton H. Fried 12
BIOS: THE LIMITS OF PLANT POWER
Arthur W. Galston 22
THIS VIEW OF LIFE: REVEREND BURNET'S DIRTY LITTLE PLANET ..... Stephen Jay Gould 26
OAXACA'S SPIRALING RACE FOR WATER
Susan H. Lees
Photographs by Mellon Tytell 30
CELESTIAL EVENTS ..... Thomas D. Nicholson 40
A YEAR IN THE LIFE OF A HARP SEAL
Fred Bruemmer 42
SEX AND THE SINGLE VOLVOX ..... Bradley Ewart 50
KILLERS FROM THE CLOUDS ..... Louis J. Battan 56
LAST DANCES OF THE BAMBARA
Pascal James Imperato 62
NOTES FROM THE FIRST FRONTIER ..... Sam Abrams 72
SKY REPORTER: SOLAR BUBBLES ..... Stephen P. Maran 78
A MATTER OF TASTE: THE MOST ARTIFICIAL SWEETENER OF THEM ALL ..... Raymond Sokolov 86
ADDITIONAL READING ..... 91
HOW EASY TO SEE THE FUTURE!
Review by Isaac Asimov 92

## MAY No. 5


AUTHORS ..... 2
FLORA, SHAMAN OF THE WINTU ..... Peter M. Knudtson 6
THIS VIEW OF LIFE: THE CHILD AS MAN'S REAL FATHER ..... Stephen Jay Gould 18
THE GREAT GATHERING AT ARAFAT
Soraya Altorki and Klaus-Friedrich Koch 24
A MATTER OF TASTE: THE ENIGMATIC EGGPLANT
Raymond Sokolov 38
CELESTIAL EVENTS ..... Thomas D. Nicholson 42
SILK MOTH OF THE RAILROAD YARDS
Robert Michael Pyle
Photographs by Andrew Skolnick 44
VINTAGE POMPEII ..... Wilhelmina F. Jashemski
Photographs by Stanley A. Jashemski 52
WATERFOWL ON A DRY CONTINENT
L. Wayne Braithwaite 60
AFRICAN SHELTER ..... Review by J. Max Bond, Jr. 70
BIOS: OASIS IN CHINA ..... Arthur W. Galston 76
ADDITIONAL READING ..... 80
ANNOUNCEMENTS ..... 82


## JUNE-JULY No. 6


AUTHORS ..... 2
TO SAVE THE WORLD FROM LIFEBOATS ..... Alan Berg 4
WHITHER THE WEATHER? ..... John Gribbin 8
THIS VIEW OF LIFE: RACISM AND RECAPITULATION
Stephen Jay Gould 18
VULTURE RESTAURANT ..... David R. Zimmerman 26
THE WANING OF THE WEST
A Special Supplement by Stan Steiner
Photographs by Bank Langmore 32
ANNOUNCEMENTS ..... 65
GINGERBREAD IN ROMANIA ..... Jan Harold Brunvand 66
THE SNAKE THAT LOST ITS HABITAT
Mark S. Newton and Russell Smith 72
A MATTER OF TASTE: GO MANGO! ... Raymond Sokolov 78
AN AWFUL WARNING ..... Review by Thomas Whiteside 84
SKY REPORTER: ASTRONOMY AT THE SPACE FRONTIER ..... Halton Arp 90
CELESTIAL EVENTS ..... Thomas D. Nicholson 94
ADDITIONAL READING ..... 96


## AUGUST-SEPTEMBER No. 7


AUTHORS ..... 2
THE DUBIOUS GAMBLE AGAINST SMALLPOX
Pascal James Imperato 8
LETTERS ..... 20
THIS VIEW OF LIFE: MAN AND OTHER ANIMALS
Stephen Jay Gould 24
BIOS: THE PRODIGAL LEAF ..... Arthur W. Galston 34
MUCH ADO ABOUT STARLINGS ..... John W. Miller 38
THE PERCEPTIVE EYE ..... 46
THE HUNDRED-YEAR HIBERNATION OF THE WATER BEAR ..... Diane R. Nelson 62
HARD TIMES ALONG THE KUSKOKWIM
Lynn D. Mason 66
SLOTH DROPPINGS ..... Paul S. Martin 74
SKY REPORTER: RED, WHITE, AND MYSTERIOUS
Stephen P. Maran 82
CELESTIAL EVENTS ..... Thomas D. Nicholson 90
OPENING OLD WOUNDS ..... Review by Theodor Rosebury 92
A MATTER OF TASTE: SALT TALK ... Raymond Sokolov 96
ADDITIONAL READING ..... 101
ANNOUNCEMENTS ..... 102


## OCTOBER No. 8


AUTHORS ..... 2
THE FIREWOOD CRISIS ..... Erik P. Eckholm 6
THIS VIEW OF LIFE: DIVERSITY THROUGH TIME
Stephen Jay Gould 24
DOWN EAST MICE ..... Kenneth L. Crowell 34
A NATURALIST AT LARGE: FISH IN SCHOOLS
Evelyn Shaw 40
ALBINISM ..... Carl J. Witkop, Jr. 48
A FORESTRY SCHEME IN SAMOA ..... Paul Shankman 60
CELESTIAL EVENTS ..... Thomas D. Nicholson 70
THE GREAT AMERICAN FOOTBALL RITUAL
William Arens 72
ADAPTATION ON THE WING ..... Thomas C. Emmel 82
TECHNIQUES OF ANCIENT SKULL SURGERY
Richard G. Wilkinson 94
SKY REPORTER: FROM BIG BANG TO ETERNITY?
Beatrice M. Tinsley 102
A MATTER OF TASTE: THE GIFTS OF THE GOAT
Raymond Sokolov 106
A TOUCH OF THE POET ..... Book Review 112
ANNOUNCEMENTS ..... 129
ADDITIONAL READING ..... 131


## NOVEMBER No. 9


AUTHORS ..... 5
LETTERS ..... 8
A NATURALIST AT LARGE: THE BLEEDS
Richard M. Klein 14
THE WEB OF HUNGER: MALNUTRITION AND INFECTION ..... Gerald T. Keusch 27
THIS VIEW OF LIFE: POSTURE MAKETH THE MAN
Stephen Jay Gould 38
STRATEGIES OF REPRODUCTION ..... R. D. Martin 48
CONNUBIAL CANNIBALISM ..... E. Jaediker Norsgaard 58
THE BEAUTIFUL BLUE DEVIL ..... Noel D. Vietmeyer 64
ALFRED MOON'S FARM
Richard F. Olivo and Henry W. Art 74
THE BIOLOGY OF BEHAVIOR
Review by Robert S. Morison 85
CELESTIAL EVENTS ..... Thomas D. Nicholson 90
SKY REPORTER: THE RED RECTANGLE
Stephen P. Maran 93
ADDITIONAL READING ..... 99
ANNOUNCEMENTS ..... 103
IF A HORSE YAWNS, RAIN IS COMING .. David Andersen 104
A MATTER OF TASTE: TURKEY IN THE SLAW
Raymond Sokolov 112


## DECEMBER No. 10


AUTHORS ..... 2
THIS VIEW OF LIFE: A THREAT TO DARWINISM
Stephen Jay Gould 4
BIOS: THE WATER FERN-RICE CONNECTION
Arthur W. Galston 10
A NATURALIST AT LARGE: THE TEA MYSTIQUE
Richard M. Klein 12
A MATTER OF TASTE: FLOUR POWER
Raymond Sokolov 30
HOW THE ELEPHANT KEEPS ITS COOL ..... Peter Hiley 34
THE SORROW AND SPIRIT OF SIX BELLS .. Tom Oakley
Photographs by Paul S. Conklin 42
ANTS ON THE MARCH ..... Howard Topoff 60
SKY REPORTER: A COSMIC CALENDAR ..... Carl Sagan 70
DRUGS, CHANTS, AND MAGIC MUSHROOMS
Review by Peter T. Furst 74
CELESTIAL EVENTS ..... Thomas D. Nicholson 80
SLAVES' HOLIDAY ..... Robert Dirks 82
ADDITIONAL READING ..... 92
ANNOUNCEMENTS ..... 98

# INDEX TO VOLUME LXXXIV

## AUTHORS AND TITLES


### A

Abrams, S., NOTES FROM THE FIRST FRONTIER, Apr., p. 72
Alexander, R.D., REVIEW, Jan., p. 92
Altorki, S., THE GREAT GATHERING AT ARAFAT, May, p.24
Andersen, D., IF A HORSE YAWNS, RAIN IS COMING, Nov., p.104
Arens, W., THE GREAT AMERICAN FOOTBALL RITUAL, Oct., p.72
Aronson, L., DESIGNING WOMEN OF WEST AFRICA, Jan., p. 52
Arp, H., ASTRONOMY AT THE SPACE FRONTIER, June, p. 90
Art, H.W., ALFRED MOON'S FARM, Nov., p.74
Aschmann, H., THE PERSISTENT GUAJIRO, Mar., p.28
Asimov, I., REVIEW, Apr., p.92

### B

Battan, L.J., KILLERS FROM THE CLOUDS, Apr., p.56
Berg, A., TO SAVE THE WORLD FROM LIFEBOATS, June, p.4
Bond, J.M., Jr., REVIEW, May, p.70
Braithwaite, L.W., WATERFOWL ON A DRY CONTINENT, May, p.60
Bruemmer, F., A YEAR IN THE LIFE OF A HARP SEAL, Apr., p.42
Brunvand, J.H., GINGERBREAD IN ROMANIA, June, p.66

### C

Carson, G., REVIEW, Mar., p.68
Crowell, K.L., DOWN EAST MICE, Oct., p.34

### D

Dirks, R., SLAVES' HOLIDAY, Dec., p.82

### E

Eckholm, E.P., THE FIREWOOD CRISIS, Oct., p.6
Eldredge, N., SURVIVORS FROM THE GOOD OLD, OLD, OLD DAYS, Feb., p.60
Emmel, T.C., ADAPTATION ON THE WING, Oct., p.82
Erda, B., CHINESE SHADOW THEATER, Feb., p.46
Ewart, B., SEX AND THE SINGLE VOLVOX, Apr., p.50

### F

Fried, M.H., THE MYTH OF TRIBE, Apr., p.12
Furst, P.T., REVIEW, Dec., p.74

### G

Galston, A.W., ROTTEN APPLES AND RIPE BANANAS, Jan., p.30; HERE COME THE CLONES, Feb., p.72; IN SEARCH OF THE ANTIAGING COCKTAIL, Mar., p.14; THE LIMITS OF PLANT POWER, Apr., p.22; OASIS IN CHINA, May, p.76; THE PRODIGAL LEAF, Aug., p.34; THE WATER FERN-RICE CONNECTION, Dec., p.10
Gould, S.J., EVOLUTION AND THE BRAIN, Jan., p.24; CATASTROPHES AND STEADY STATE EARTH, Feb., p.14; VELIKOVSKY IN COLLISION, Mar., p.20; REVEREND BURNET S DIRTY LITTLE PLANET, Apr., p.26; THE CHILD AS MAN'S REAL FATHER, May, p.18; RACISM AND RECAPITULATION, June, p.18; MAN AND OTHER ANIMALS, Aug., p.24; DIVERSITY THROUGH TIME, Oct., p.24; POSTURE MAKETH THE MAN, Nov., p.38; A THREAT TO DARWINISM, Dec., p.4
Gribbin, J., WHITHER THE WEATHER? June, p.8

### H

Hiley, P., HOW THE ELEPHANT KEEPS ITS COOL, Dec., p.34
Hill, G., REVIEW, Mar., p.70
Homewood, K.M., MONKEY ON A RIVERBANK, Jan., p.68

### I

Imperato, P.J., LAST DANCES OF THE BAMBARA, Apr., p.62; THE DUBIOUS GAMBLE AGAINST SMALLPOX, Aug., p.8

### J

Jashemski, W.F., VINTAGE POMPEII, May, p.52

### K

Keusch, G.T., MALNUTRITION AND INFECTION: DEADLY ALLIES, Nov., p.27
Klein, R.M., THE BLEEDS, Nov., p.14; THE TEA MYSTIQUE, Dec., p.12
Knudtson, P.M., FLORA, SHAMAN OF THE WINTU, May, p.6
Koch, K-F., THE GREAT GATHERING AT ARAFAT, May, p. 24

### L

Lees, S.H., OAXACA'S SPIRALING RACE FOR WATER, Apr., p.30

### M

McMahan, P., THE VICTORIOUS COYOTE, Jan., p.42
Maran, S.P., SOLAR BUBBLES, Apr., p.78; RED, WHITE, AND MYSTERIOUS, Aug., p.82; THE RED RECTANGLE, Nov., p.93
Martin, P.S., SLOTH DROPPINGS, Aug., p.74
Martin, R.D., ASCENT OF THE PRIMATES, Mar., p.52; STRATEGIES OF REPRODUCTION, Nov., p.48
Mason, L.D., HARD TIMES ALONG THE KUSKOKWIM, Aug., p.66
Miller, J.W., MUCH ADO ABOUT STARLINGS, Aug., p.38
Mitchell, J.G., REVIEW, Oct., p.122
Momaday, N.S., TO THE SINGING, TO THE DRUMS, Feb., p.38
Morison, R.S., REVIEW, Nov., p. 85
Moseley, M.E., SECRETS OF PERU'S ANCIENT WALLS, Jan., p.34
Murray, R.C., THE GEOLOGIST AS PRIVATE EYE, Feb., p. 22

### N

Nelson, D.R., THE HUNDRED-YEAR HIBERNATION OF THE WATER BEAR, Aug., p.62
Newton, M.S., THE SNAKE THAT LOST ITS HABITAT, June, p.72
Nicholson, T.D., CELESTIAL EVENTS, Jan., p.86; Feb., p.76; Mar., p.82; Apr., p.40; May, p.42; June, p.94; Aug., p.90; Oct., p.70; Nov., p.90; Dec., p.80
Norsgaard, E.J., CONNUBIAL CANNIBALISM, Nov., p.58

### O

Oakley, T., THE SORROW AND SPIRIT OF SIX BELLS, Dec., p.42
Olivo, R.F., ALFRED MOON'S FARM, Nov., p.74
Oster, G., THE PREVALENCE OF FIVES, Mar., p.76

### P

Puleston, D., RETURN OF THE OSPREY, Feb., p.52
Pyle, R.M., SILK MOTH OF THE RAILROAD YARDS, May, p. 44

### R

Reiter, E.R., RAPID RIVERS OF AIR, Mar., p.46
Richie, D., REVIEW, Mar., p.62
Rosebury, T., REVIEW, Aug., p.92

### S

Sagan, C., IN PRAISE OF ROBOTS, Jan., p.8; KALLIOPE AND THE KAA'BA: THE ORIGIN OF METEORITES, Mar., p.8; A COSMIC CALENDAR, Dec., p.70
Schmid, M.J. and R., LIVING LINKS WITH THE PAST, Mar., p. 38
Shankman, P., A FORESTRY SCHEME IN SAMOA, Oct., p. 60

Shapiro, J., REVIEW, Feb., p.78
Shaw, E., FISH IN SCHOOLS, Oct., p.40
Smith, R., THE SNAKE THAT LOST ITS HABITAT, June, p.72
Sokolov, R., THE MELTING POT, Jan., p.98; A PLANT OF ILL REPUTE, Feb., p.70; POTATOES ARE CHEAPER, Mar., p.78; THE MOST ARTIFICIAL SWEETENER OF THEM ALL, Apr., p. 86; THE ENIGMATIC EGGPLANT, May, p.38; GO MANGO! June, p.78; SALT TALK, Aug., p. 96; THE GIFTS OF THE GOAT, Oct., p.106; TURKEY IN THE SLAW, Nov., p.112; FLOUR POWER, Dec., p.30
Speth, J.G., THE HAZARDS OF PLUTONIUM, Jan. p.74
Stegner, W., REVIEW, Jan., p.96
Steiner, S., THE WANING OF THE WEST, June, p. 32

## T

Tahoe Research Group, The, TAHOE'S TROUBLED WATERS, Jan., p. 60
Thomas, L., THE WORLD'S BIGGEST MEMBRANE, Feb., p. 12
Tinsley, B.M., FROM BIG BANG TO ETERNITY? Oct., p.102
Topoff, H., ANTS ON THE MARCH, Dec., p.60
Turner, J.R.G., A TALE OF TWO BUTTERFLIES, Feb., p.28

## V

Vietmeyer, N.D., THE BEAUTIFUL BLUE DEVIL, Nov., p.64

## W

Whiteside, T., REVIEW, June, p.84
Wilkinson, R.G., TECHNIQUES OF ANCIENT SKULL SURGERY, Oct., p.94
Witkop, C.J., Jr., ALBINISM, Oct., p.48

## Z

Zimmerman, D.R., VULTURE RESTAURANT, June, p.26

# SUBJECT MATTER

**AFRICA**
Kenya, Jan., p.68
Aging and genetics, Mar., p.14
**AGRICULTURE**
Water fern, Dec., p.10
Rice, Dec., p.10
Air currents, Mar., p.46
Alaska, Eskimo, Aug., p.66
Albinism, Oct., p.48
Alga, *Volvox*, Apr., p.50
America, California snakes, June, p.72
American culture, Oct., p.72
**AMERICAN INDIANS**
Guajiro, Mar., p.28
Santa Clara, Feb., p.38
Kiowa, Feb., p.38
Wintu, May, p.6
American West, June, p.33
Ancient city, Pompeii, May, p.52
**ANIMAL BEHAVIOR**
Coyote, Jan., p.42
Elephant, Dec., p.34
Goat, Oct., p.106
Ground sloth, Aug., p.74
Harp seal, Apr., p.40
Mice, Oct., p.34
Primates, Mar., p.52; Nov., p.48
Tana mangabey, Jan., p.68
Turkey, Nov., p.112
**ANTHROPOLOGY**
Arabs, May, p.24
Bambara of Mali, Apr., p.62
Chinese Shadow Theater, Feb., p.46
Eskimo, Aug., p.66
Football, Oct., p.72
Guajiro Indians, Mar., p.28
Peru, Jan., p.34
Physical, Nov., p.48
Samoa, Oct., p.60
Skull surgery, Oct., p.94
Slavery, Dec., p.82
Taimpe Society, Feb., p.38
Tribes, Apr., p.12
Wales, mining village, Dec., p.42
Wintu Indians, May, p.6
Antiaging, Mar., p.14
Ants, Dec., p.60
Apples, Jan., p.30
Arabs, May, p.24
Arafat, Saudi Arabia, May, p.24
**ARCHITECTURE**
African shelter, May, p.70
Peru, ancient, Jan., p.34
Romania, peasant homes, June, p.66
**ASTRONOMY**
Asteroids, Mar., p.8
Atmosphere, Feb., p.12; June, p.90
Cosmic calendar, Dec., p.70
Celestial Events, Jan., p.86; Feb., p.76; Mar., p. 82; Apr., p.40; May, p.42; June, p.94; Aug., p.90; Oct., p.70; Nov., p.90; Dec., p.80
Eclipses, Apr., p.78
Gravity, Oct., p.102
Kaa'ba, Mar., p.8
Kalliope, Mar., p.8
Meteorites, Mar., p.8
Red rectangle, Nov., p.93
Sirius, Aug., p.82
Sky Reporter, Feb., p.12; Mar., p.8, Apr., p.78; June, p.90; Aug., p.82; Nov., p.93; Dec., p.70
Solar bubbles, Apr., p.78
Stars, Aug., p.82
Atmosphere, Feb., p.12; June, p.90
Australia, May, p.60
Bambara of Mali, Apr., p.62
Bananas, Jan., p.30
Biochemistry, Lake Tahoe, Jan., p.60
Biological numerology, Mar., p.76
**BIOLOGY**
Animal cloning, Feb., p.72
Antiaging, Mar., p.14
Apples and bananas, Jan., p.30
Farm, Nov., p.74
Plants, Apr., p.22
Volvox, Apr., p.50

**BIOS**
Antiaging, Mar., p.14
Apples and bananas, Jan., p.30
China, May, p.76
Clones, Feb., p.72
Leaf, Aug., p.34
Plant power, Apr., p.22
Turkey, Nov., p.112
Water fern-rice, Dec., p.10
**BIRDS**
Ducks and geese, May, p.60
Osprey, Feb., p.52
Starlings, Aug., p.38
Turkey, Nov., p.112
Vulture, June, p.26
**BOTANY**
Bristlecone pine, Mar., p.38
China, May, p.76
Eggplant, May, p.38
Fruit, Jan., p.30
Leaves, Aug., p.34
Mango, June, p.78
Plants, Apr., p.22
Potatoes, Mar., p.78
Rice, Dec., p.10
Tea, Dec., p.12
Volvox, Apr., p.50
Water fern, Dec., p.10
Water hyacinth, Nov., p.64
Brain, Jan., p.24
Bristlecone pine, Mar., p.38
Butterflies, Feb., p.28; Oct., p.82
Cane sugar, Apr., p.86
Celestial Events *see* Astronomy
Ceremony, tea, Dec., p.12
Chimpanzee, Aug., p.24
China, May, p.76
Chinese shadow theater, Feb., p.46; tales, Feb., p.47
Christmas, Dec., p.82
Civilization, ancient, Jan., p.34
Climate, June, p.8
Cloning, Feb., p.72
Communication, Jan., p.8
Computer, Jan., p.8
Cosmic calendar, Dec., p.70
Continental drift, Mar., p.20
Coyote, Jan., p.42
Crime detection and geology, Feb., p.22
Cynthia (silk) moth, May, p.44
**DANCES**
Bambara, Apr., p.62
Gourd, Feb., p.38
Darwin, Aug., p.24; Oct., p.82; Dec., p.4
**DISEASE**
Bleeds, Nov., p.14
Dancing or cats, June, p.84
Malnutrition, Nov., p.27
Smallpox, Aug., p.8
Diversity, Oct., p.24
Ducks, May, p.60
**EARTH**
Atmosphere, Feb., p.12; June, p.90
Catastrophes, Feb., p.14
Climate, June, p. 8
Collision, Mar., p.20
History, Apr., p.26
Knowledge of, Feb., p.22
Eclipses, Apr., p.78
Eco-activism, Apr., p.26
**ECOLOGY**
Habitats, Oct., p.82
Lake Tahoe, Jan., p.60
Mice, Oct., p.34
Shasta ground sloth, Aug., p.74
Tana River, Kenya, Jan., p.68
**ECOSYSTEM**
Lake Tahoe, Jan., p.60
Tana River, Kenya, Jan., p.68
Eggplant, May, p.38
Elements, recycling plutonium, Jan., p.74
Elephant, Dec., p.34
**ENVIRONMENT**
Firewood and fuel, Oct., p.6
Osprey and DDT, Feb., p.52
Plutonium, Jan., p.74
Samoa, Oct., p.60
Tahoe Research Group, Jan., p.60
Eskimo, Alaska, Aug., p.66
Ethylene, natural gas, Jan., p.30
**EVOLUTION**
Brain, Jan., p.24
Theory of, Aug., p.24; Dec., p.4
Volvox, Apr., p.50
Fabrics, dyeing, Jan., p.52
Farm, Apr., p.72; Nov., p.74
**FARMING**
Mexico, Apr., p. 30
New England, Apr., p.72; Nov., p.74
Finland, weather proverbs, Nov., p.110
Firewood, Oct., p.6
Fish schools, Oct., p.40
Fivefold symmetry, Mar., p.76
Flour, Dec., p.30
Folk art, Romania, June, p.66
**FOOD**
Diverse, Jan., p.98
Eggplant, May, p.38
Flour, Dec., p.30
Fuel, Oct., p.6
Garlic, Feb., p.70
Goat, Oct., p.106
Mangos, June, p.78
Potatoes, Mar., p.78
Problems, June, p.4
Salt, Aug., p.96
Sugar, Apr., p.86
Turkey, Nov., p.112
and Weather, June, p.8
Football, Oct., p.82
Forestry, Oct., p.6; Oct., p.60
Forests, rain, Oct., p.82
**FRUIT**
Apples and bananas, Jan., p.30
Mango, June, p.78
Fuel and firewood, Oct., p.6
Garlic, Feb., p.70
Geese, May, p.60
**GENETIC**
Disorder, Oct., p.48
Engineers, Feb., p.72
**GEOLOGY**
and Crime detection, Feb., p.22
Earth history, Apr., p.26
Earth upheaval, Mar., p.20
Planet earth, Feb., p.14
Goats, Oct., p.106
Gourd dance, Feb., p.38
Gravity, Oct., p.102
Ground sloth, Aug., p.74

Guajiro Indians, Mar., p.28
Harp seal, Apr., p.40
Healer, shaman, American Indians, May, p.6
Heliconius, butterflies, Feb., p.28
Hibernation, water bear, Aug., p.62
Horseshoe crab, Feb., p.60
Horticultural methods, May, p.76
Hunger, Nov., p.27
Hyacinth, water, Nov., p.64
Infection, Nov., p.27
**INSECTS**
Ants, Dec., p.60
Butterflies, Feb., p.28; Oct., p.82
Praying mantis, Nov., p.58
Silk moth, May, p.44
Islam, Apr., p.62
Italy, Pompeii, May, p.52
**INVERTEBRATES**
Horseshoe crab, Feb., p.60
Water bear, Aug., p.62
Jamaica, slavery, Dec., p.82
Jet streams, Mar., p.46
Kaa'ba meteorite, Mar., p.8
Kalliope meteorite, Mar., p.8
Kuskowagamiut Eskimo, Alaska, Aug., p.66
Lake Tahoe, Jan., p.60
Leaves, Aug., p.34
**LETTERS TO THE EDITOR**, Jan., p.88; Feb., p.8; Mar., p.4; Aug., p.20; Nov., p.8
Living fossils, horseshoe crabs, Feb., p.60
Machine, Jan., p.8
Malnutrition, Nov., p.27
**MAMMALS**
Chimpanzee, Aug., p.24
Coyote, Jan., p.42
Elephant, Dec., p.34
Goat, Oct., p.106
Mice, Oct., p.34
Monkey, Jan., p.68
Primate, Mar., p.52; Nov., p.48
Seal, Apr., p.40
Mango, June, p.78
**MATTER OF TASTE**
Cuisine of mixed cultures, Jan., p.98
Eggplant, May, p.38
Flour, Dec., p.30
Garlic, Feb., p.70
Goat milk, Oct., p.106
Mango, June, p.78
Potatoes, Mar,, p.78
Salt, Aug., p.96
Sugar, Apr., p.86
Turkey, Nov., p.112
Medicine, skull surgery, Oct., p.94
Meteorites, Mar., p.8
Meteorology, tornadoes, Apr., p.56
Mexico, Oaxaca, Apr., p.30
Mice, Oct., p.34
Microorganisms, Lake Tahoe, Jan., p.60
Migration, harp seal, Apr., p.42
Mineral, salt, Aug., p.96
Mining village, Wales, Dec., p.42
Monkeys, Tana mangabey, Jan., p.68
Monuments, prehistoric, Jan., p.34
Mountain King snake, June, p.72
Muslim pilgrimage, May, p.24
Natural gas, ethylene, Jan., p.30
**NATURALIST AT LARGE**
Bleeds, Nov., p.14
Fish, Oct., p.40
Tea, Dec., p.12
Neoteny, May, p.18
New England farming, Apr., p.72; Nov., p.74
Osprey, Feb., p.52
Paleontology, Shasta ground sloth, Aug., p.74
Peru, Jan., p.34
Photographic competition, Aug., p.46
Physical anthropology, Nov., p.48
Pigment defects, Oct., p.48
**PLANTS**
Electric currents, Apr., p.22
Nonarid regions, Aug., p.34
Plutonium recycling, Jan., p.74
Political shorthand, June, p.4
Pompeii, Italy, May, p.52
Posture, Nov., p.38
Potatoes, Mar., p.78
Praying mantis, Nov., p.58
Pre-Columbian Peru, Jan., p.34
Primates, Jan., p.68; Mar., p.52; Nov., p.48
Puppets, Chinese, Feb., p.46
Racism, June, p.18
Ranches, June, p.33
Recapitulation, June, p.18
Reproduction, mammals, Nov., p.48
Recycling, Jan., p.74
Red rectangle, Nov., p.93
Reptiles, snakes, June, p.72
Rice, Dec., p.10
River Tana, Kenya, Africa, Jan., p.68
Robots, Jan., p.8
Romania, June, p.66
Salt, Aug., p.96
Samoa, Western, Oct., p.60
Schools, fish, Oct., p.40
Science, Apr., p.26
Scientific theories and racism, June, p.18
Seal, Apr., p.40
Settlers and ranchers, June, p.33
Sex and algae, Apr., p.50
Shadow theater, Chinese, Feb., p.46
Shaman, Wintu Indians, May, p.6
Shasta ground sloth, Aug., p.74
Silk industry, May, p.44; moth, May, p.44
Sirius, Aug., p.82
Skull surgery, ancient, Oct., p.94
Sky Reporter *see* Astronomy
Slavery, Dec., p.82
Sloth, Aug., p.74
Smallpox, Aug., p.8
Snakes, June, p.72
Solar bubbles, Apr., p.78
**SOUTH AMERICA**
Guajiro Indians, Mar., p.28
Peru, Jan., p.34
Rain forests, Oct., p.82
Spain, vulture ground, June, p.26
Starlings, Aug., p.38
Stars, Aug., p.82
Strip mines, June, p.33
Sugar, cane, Apr., p.86
Surgery, skull, Oct., p.94
Taimpe, or gourd, dance, Feb., p.38
Tana mangabeys, monkeys, Jan., p.68
Tardigrades, Aug., p.62
Tea, Dec., p.12
**TECHNOLOGY**
and the Bambara, Apr., p.62
and farming, Oaxaca, Apr., p.30
Textiles, fabric dyeing, Jan., p.52
**THEORY**
Evolution, Aug., p.24; Dec., p.4
Tornadoes, Apr., p.56
**THIS VIEW OF LIFE**
Catastrophes, Feb., p.14
Child, May, p.18
Darwinism, Dec., p.4
Evolution and brain, Jan., p.24
Man, Aug., p.24
Posture, Nov., p.38
Racism, June, p.18
Rev. Burnet, Apr., p.26
Time, Oct., p.24
Velikovsky, Mar., p.20
Time, Oct., p.24
Tornadoes, Apr., p.56
Tree rings, Mar., p.38
Tribes, Apr., p.12
Turkey, Nov., p.112
USA, Maine, Oct., p.34
Velikovsky, I., Mar., p.20
Vietnam, rice agriculture, Dec., p.10
Virus, Aug., p.8
Volvox, alga, Apr., p.50
Vulture, June, p.26
Wales, mining, Dec., p.42
Water bear, Aug., p.62
Water fern, Dec., p.10
Waterfowl, May, p.60
Water hyacinth, Nov., p.64
**WEATHER**
Changes, June, p.8
Jet streams, Mar., p.46
Prediction, Finland, Nov., p.104
Tornadoes, Apr., p.56
West Africa, Jan., p.52; Apr., p.62
Wheat, Dec., p.30
Winds, Mar., p.46
Wintu Indians, May, p.6
World food problem, June, p.4
Zapotec farmers, Apr., p.30
Zoology, tardigrades, Aug., p.62

## BOOKS IN REVIEW

*Ansel Adams: Images 1923-1974*, Jan., p.96
*Art of the Japanese Kite, The*, Mar., p.62
*Astounding-Analog Reader, The*, Apr., p.92
*Before the Golden Age*, Apr., p. 92
*BioGraffiti: A Natural Selection*, Oct., p.112
*Biological Control by Natural Enemies*, Jan., p.92
*Gathering of Animals*, Mar., p.68
*Healing Hand, The: Man and Wound in the Ancient World*, Aug., p.92
*Indigenous African Architecture*, May, p.70
*Man Who Awoke, The*, Apr., p.92
*Maria Sabina and Her Mazatec Mushroom Velada*, Dec., p.74
*Minamata*, June, p.84
*Modern Science Fiction*, Apr., p.92
*River for the Living, A*, Oct., p.122
*Science Fiction Hall of Fame*, Vol. 1, Apr., p.92; Vols. 2A and 2B, Apr., p.92
*Sociobiology*, Nov., p.85
*Supership*, Mar., p.70
*Women of the Forest*, Feb., p.78